

1 **Claims**

2 **Claim 1.** A computer-implemented prescription management  
3 system for use by a prescriber in creating a prescription at  
4 a point of patient care, said prescription being usable by a  
5 pharmacist to dispense drugs, said prescription management  
6 system comprising:

7 a) electronic posting means to select and capture in said  
8 prescription:

9 i) a patient identifier;

10 ii) a prescribed drug;

11 iii) a dosage for said prescribed drug; and

12 iv) a patient condition intended by said prescriber to  
13 be treated by said prescribed drug; and

14 b) a displayable library of prescribable drugs; and

15 c) displayable patient drug formulary information to  
16 indicate to said prescriber-user selected ones of said  
17 prescribable drugs included within a drug formulary  
18 associated with said patient to enable compliance with drug  
19 formulary guidelines at the point-of-care.

20

21 **Claim 2.** A prescription management system according to  
22 Claim 1 having means to track preferred data usage by a user  
23 and to adapt data displays to favor such preferred usage,  
24 whereby the system learns and adapts to a user's habits.

25

26 **Claim 3.** A prescription management system according to

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1 Claim 2 wherein at least one said preferred usage data  
2 display comprises a personal-preference condition-selection  
3 list for each system user.

4  
5 **Claim 4.** A prescription management system according to  
6 Claim 2 wherein at least one said preferred usage data  
7 display comprises a personal-preference drug-selection list  
8 for each system user.

9  
10 **Claim 5.** A prescription management system according to  
11 Claim 1 further comprising a patient history record  
12 displayed online, said patient history record listing  
13 electronically available prior prescriptions, said prior  
14 prescriptions each including a prescribed drug and a  
15 condition treatment objective for each drug prescribed,  
16 system-created prescriptions being system-added to said  
17 history record.

18  
19 **Claim 6.** A prescription management system according to  
20 Claim 5 comprising a patient condition list for selection of  
21 a patient condition for posting to said prescription, said  
22 patient condition list comprising patient conditions listed  
23 in said patient history record.

24  
25 **Claim 7.** A prescription management system according to  
26 Claim 1 comprising a source-oriented data-retrieval

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1 subsystem, said data retrieval subsystem accessing at least  
2 one data-retrieval networks to supply an array of up-to-date  
3 prescribing information and patient-related data to the  
4 point-of-care from remote source databases.

5  
6 **Claim 8.** A prescription management system according to  
7 Claim 7 wherein said data-retrieval subsystem is linked to  
8 the prescription management system to provide allergy and  
9 interaction alerts, formulary changes, new drug approvals,  
10 and to lock out or warn against, the prescribing of  
11 inappropriate or recalled drugs.

12  
13 **Claim 9.** A prescription management system according to  
14 Claim 1 wherein said patient history record is dynamically  
15 assembled online in response to a user request from multiple  
16 source record elements retrieved from multiple heterogenous  
17 remote databases.

18  
19 **Claim 10.** A prescription management system according to  
20 Claim 9 implemented on a user interface device configured  
21 for networked digital communication with a host computer  
22 facility, wherein said patient history record is retrieved  
23 as said record elements from said remote databases by said  
24 host computer facility in response to a call from said user  
25 device said remote source databases being selected and  
26 identified according to said patient's prior geographical

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1 locations and health-care service providers.

2

3 **Claim 11.** A prescription management system according to  
4 Claim 5 wherein said patient history record is a virtual  
5 patient record newly assembled online in response to each  
6 user request for said record thereby to be current with  
7 regard to possible remote updates of said source record  
8 elements.

9

10 **Claim 12.** A prescription management system according to  
11 Claim 11 wherein said host computer facility logs the time,  
12 date and user calling for said virtual patient record to  
13 provide an audit trail of access to said patient's record,  
14 or a provider's or organization's data.

15

16 **Claim 13.** A prescription management system according to  
17 Claim 11 deployed comprehensively throughout a geographical  
18 area, demographic, company, plan or community group whereby  
19 all drug prescriptions created in said area are products of  
20 said system and wherein all said drug prescriptions are  
21 posted to source databases accessible to said system whereby  
22 a complete patient history record of all drug prescriptions  
23 created for said patient in said geographical area,  
24 demographic, company, plan or community group can be listed  
25 in said dynamically assembled virtual patient record.

26

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1 **Claim 14.** A prescription management system according to  
2 Claim 1 wherein said drugs in said drug list are classified  
3 according to a patient condition for which said drugs have  
4 efficacy and said prescription management system further  
5 comprises a patient-condition specification procedure for  
6 selecting said condition from groups of possible conditions  
7 and an onscreen drug selection procedure for selecting said  
8 prescribed drug from said library, listing multiple drugs  
9 for treating each said patient problem.

10  
11 **Claim 15.** A prescription management system according to  
12 Claim 1 wherein said patient drug formulary display means  
13 comprises a condition-driven formulary drug list, and a  
14 condition-driven nonformulary drug list, said drug lists  
15 being changeable according to the patient selected.

16  
17 **Claim 16.** A prescription management system according to  
18 Claim 15 wherein said system provides drug efficacy  
19 guidelines based on patient information and formulary  
20 information.

21  
22 **Claim 17.** A prescription management system according to  
23 claim 3  
24 wherein said prescriber-user's personal-preference list of  
25 drugs displayed with formulary drugs indicated.

26

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1 **Claim 18.** A prescription management system according to  
2 Claim 1 including relative cost information for displayed  
3 formulary drugs.

4  
5 **Claim 19.** A prescription management system according to  
6 Claim 1 wherein said drug formulary is generated by a  
7 prescription benefits management company by providing  
8 computer access to remote databases containing said drug  
9 formulary information whereby appropriate formulary drugs  
10 are presented to said user on screen on a user interface  
11 device deployable at said point-of-care, to facilitate  
12 compliance with drug formulary guidelines at said point-of-  
13 care.

14  
15 **Claim 20.** A prescription management system according to  
16 Claim 1  
17 wherein prescribability of a drug pursuant to formulary  
18 guidelines is formulary-qualified according to said patient  
19 condition.

20  
21 **Claim 21.** A prescription management system according to  
22 Claim 1 comprising built-in logic for accessing drug  
23 formulary information from multiple drug formulary providers  
24 wherein said drug formulary list is selected from said  
25 multiple available drug formularies according to said  
26 patient identification, said patient having a prior

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1 arrangement with said drug formulary provider to provide  
2 prescription-related benefits to that patient, said drug  
3 formulary list information being dynamically presented to  
4 said prescriber-user in the form of at least one selection  
5 of patient-specific formularies from which a formulary  
6 status indication relevant to a patient therapy-related  
7 choice made by said prescriber-user is made.

8  
9 **Claim 22.** A prescription management system according to  
10 Claim 21 comprising network data communication means to  
11 update and maintain said multiple available formularies from  
12 remote source databases of formulary information.

13  
14 **Claim 23.** A prescription management system according to  
15 Claim 1 wherein comprising means to categorize and display  
16 said patient conditions categorized into multiple lists,  
17 said lists being selected from the group consisting of a  
18 personal condition list of conditions encountered by the  
19 prescriber, a historical condition list of conditions  
20 exhibited by the patient, one or more prescriber-customized  
21 condition lists, a body system condition list, conditions  
22 organized according to disease pathology, therapy, personal  
23 knowledge and others.

24  
25 **Claim 24.** A prescription management system according to  
26 Claim 23 wherein drug selection is condition driven and said

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1   prescriber selects a patient condition to be treated via at  
2   least one of said condition lists.

3  
4   **Claim 25.** A prescription management system according to  
5   Claim 24 wherein a prescriber-user can intelligently to  
6   access a large body of drug data selections via multiple  
7   condition-driven routes to provide multiple mapping so that  
8   the user can find a suitable drug or selection of drugs via  
9   different pathways according to their preferred work  
10   methods.

11  
12   **Claim 26.** A prescription management system according to  
13   Claim 1 wherein said electronic posting means can select and  
14   capture dosage and route of administration information, and  
15   optionally, length-of-treatment and generic substitution  
16   authorization information, for a selected drug, said  
17   information being system-available for all listed drugs.

18  
19   **Claim 27.** A prescription management system according to  
20   Claim 26 comprising network data communication means to  
21   update and maintain said dosage information said dosage  
22   information being dynamically supplied from a remote source  
23   database when called by the system.

24  
25   **Claim 28.** A prescription management system according to  
26   Claim 1 comprising a prescription expiration routine

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1 including dosing, amount and expiration drug quantifiers and  
2 system calculation of a relationship between said drug  
3 quantifiers where said system provides default values for  
4 unspecified ones of said drug quantifiers in response to  
5 user selection of one or more of said drug quantifiers and  
6 optionally patient history information, formulary  
7 information indicating preferred drug lists for treatment.

8  
9 **Claim 29.** A prescription management system according to  
10 Claim 2 comprising a patient data access control subsystem  
11 including data access control specification means enabling a  
12 patient to authorize a user to access said patient's history  
13 data and comprising data access control means whereby only  
14 an authorized user can access said patient's data.

15  
16 **Claim 30.** A prescription management system according to  
17 Claim 29 comprising a patient data access auditor, said  
18 patient data access auditor generating an access record  
19 logging information as to the time date and identity of  
20 entities accessing said patient history data, to provide a  
21 patient data access audit trail and optionally further  
22 comprising similar access audit means for generating an  
23 access record logging similar information regarding access  
24 to a prescriber' or organization's data.

25  
26 **Claim 31.** A prescription management system according to

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1 Claim 1 comprising a patient data access subsystem providing  
2 patient-directed control of the flow of their own data.

3  
4 **Claim 32.** A prescription management system according to  
5 Claim 31 wherein said patient-directed data-access control  
6 is achieved by centrally inputting to said patient data  
7 access subsystem at a host computer facility, patient-  
8 generated record-access specifications determining which  
9 parties can access what data during what period of time.

10  
11 **Claim 33.** A prescription management system according to  
12 Claim 32 wherein said patient-generated record-access  
13 specifications provide a patient security profile in a pre-  
14 authorization file said pre-authorization file being used to  
15 control access to said patient's data.

16  
17 **Claim 34.** A prescription management system according to  
18 Claim 1 comprising user-related historical records generated  
19 by operation of said system by a prescriber-user, a user  
20 data-access control subsystem including data-access control  
21 specification means enabling a user to authorize selective  
22 third party access to said user's history data and  
23 comprising data access control means whereby only an  
24 authorized third party can access said user's data and what  
25 data type may be accessed by what organization or provider.

26

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1 **Claim 35.** A prescription management system according to  
2 Claim 20 comprising a user data access auditor, said user  
3 data access auditor generating an access record logging  
4 information as to the time date and identity of third  
5 parties accessing said user history data, to provide a user  
6 data access audit trail.

7  
8 **Claim 36.** A prescription management system according to  
9 Claim 1 comprising organization-generated source data  
10 retrievable for display in said prescription-management  
11 system from at least one remote database an organization-  
12 directed data-access control subsystem including data-access  
13 control specification means enabling an organization to  
14 authorize selective third party access to said organization-  
15 generated source data and comprising data access control  
16 means whereby only an authorized third party can access said  
17 organization-generated source data.

18  
19 **Claim 37.** A prescription management system according to  
20 Claim 36 comprising an organization data access auditor,  
21 said organization data access auditor generating an access  
22 record logging information as to the time date and identity  
23 of third parties accessing said organization-generated  
24 source data to provide an organization data access audit  
25 trail.

26

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1 **Claim 38.** A prescription management system according to  
2 Claim 2 comprising newly created prescription evaluation  
3 means to evaluate a newly prescribed drug for system-known  
4 patient allergies or drug-to-drug interactions, or drug-to-  
5 multiple drug interactions and absolute contraindications  
6 with currently prescribed drugs, as known to the system.  
7

8 **Claim 39.** A prescription management system according to  
9 Claim 2 comprising a drug alert subsystem for communicating  
10 alerts relating to unfavorable or cautionary characteristics  
11 of particular drugs wherein said alerts are associated with  
12 system information on the drug so that when a user calls up  
13 the drug in question, they receive the warning or alert, or  
14 other special message.  
15

16 **Claim 40.** A prescription management system according to  
17 Claim 39 wherein said drug alert subsystem is operative to  
18 communicate drug withdrawal information to system users  
19 electronically in real time or when said withdrawn drug is  
20 selected for prescribing or a warning is posted directly to  
21 the prescription.  
22

23 **Claim 41.** A prescription management system according to  
24 Claim 40 whereby a drug can be withdrawn from the market the  
25 same day by making a system entry preventing completion of a  
26 prescription for the withdrawn drug.

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1 **Claim 42.** A prescription management system according to  
2 Claim 40 wherein current users of a drug or medication can  
3 be identified from prescription history records, referencing  
4 not only drugs prescribed, but also prescription expiry  
5 dates and both the patient and their doctor are notified of  
6 said drug withdrawal optionally for the physician via direct  
7 point-to-point electronic mail.

8  
9 **Claim 43.** A prescription management system according to  
10 Claim 1 comprising onscreen electronic mail access to other  
11 users of said system, said electronic mail capability  
12 additionally being linked with said prescription creation  
13 function and enabling a prescriber-user to append an  
14 electronic record to a prescription or prescription-related  
15 record.

16  
17 **Claim 44.** A prescription management system according to  
18 Claim 43 wherein said electronic mail provides a platform  
19 for accessing other artificial intelligence and expert  
20 systems and optionally providing linkage for transaction  
21 services such as the ordering and reviewing of scheduling  
22 and similar administrative functions.

23  
24 **Claim 45.** A prescription management system according to  
25 Claim 1  
26 comprising a patient-selection subsystem whereby preliminary

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1 selection of groups of patients can be made by providing  
2 multiple patient lists selected from the group consisting of  
3 "Today's Patients", "In-Patients", "Out-Patients", "Private  
4 Patients" and others.

5  
6 **Claim 46.** A prescription management system according to  
7 Claim 45 wherein said patient lists are system-maintained,  
8 on an ongoing basis, using the latest data available to the  
9 system and include intelligent patient selection means  
10 enabling the user to select a convenient group of patients  
11 that has a high probability of including the next patient or  
12 patients to be encountered, thereby speeding access and  
13 retrieval of a desired patient record.

14  
15 **Claim 47.** A prescription management system according to  
16 Claim 1 comprising onscreen access to drug detail  
17 information as to indications, interactions, side effects  
18 and precautions.

19  
20 **Claim 48.** A prescription management system according to  
21 Claim 1 comprising a drug literature-retrieval subsystem to  
22 retrieve drug -related information across a network from a  
23 remote heterogenous database for display to said user in  
24 real time.

25  
26 **Claim 49.** A prescription management system according to

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1 Claim 48 wherein said drug literature-retrieval subsystem  
2 provides the user with an access point to full disclosure  
3 and prescribing information on a selected drug and wherein  
4 available said drug information is selected from the group  
5 consisting of drug-treatment guidelines, one or more  
6 literature references supporting said guidelines, details of  
7 the particular conditions for which a system-suggested  
8 alternative drug has been found effective, adverse  
9 conditions, preferred dosages and administration routes,  
10 literature sources and other relevant drug-prescribing  
11 information.

12  
13 **Claim 50.** A prescription management system according to  
14 Claim 49 wherein said drug literature-retrieval subsystem is  
15 operative to enable a physician, to have a hard or printed  
16 copy, or other media form of relevant studies or literature  
17 sent to them by onscreen selection, said onscreen selection  
18 being system-communicated to a source for said study or  
19 literature information.

20  
21 **Claim 51.** A prescription management system according to  
22 Claim 49 wherein said drug literature-retrieval subsystem is  
23 operative to provide a simple nonintrusive technique for  
24 bringing new drug information to physicians at a point of  
25 care when creating a prescription.

26

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1 **Claim 52.** A prescription management system according to  
2 Claim 49 comprising an outcome study subsystem for selecting  
3 outcome study participants by centrally maintaining patient-  
4 directed patient-record-access specifications whereby the  
5 system can include records of patients agreeable to becoming  
6 study participants in such outcome studies pursuant to  
7 indications in their patient-record-access specifications  
8 optionally with output of said study data being controlled  
9 to comply with access specifications of prescribers and  
10 organizations having proprietary rights thereto.

11  
12 **Claim 53.** A prescription management system according to  
13 Claim 1 comprising a new drug surveillance subsystem to  
14 conduct post introduction market surveillance of new drugs  
15 for adverse outcomes to the treatment of a specified  
16 condition or conditions with the newly introduced drug.

17  
18 **Claim 54.** A prescription management system according to  
19 Claim 53 wherein said new drug surveillance subsystem is  
20 operative to monitor patients reporting new problems after  
21 having been prescribed the new drug in question, refer such  
22 new problems to the physician user to qualify them for  
23 medical relevance and then statistically compare a  
24 collection of similar reports with data on a pool of  
25 similarly treated patients for significance.

26

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1 **Claim 55.** A prescription management system according to  
2 Claim 1 wherein said condition list comprises at least five  
3 conditions, and said drug list comprises at least five  
4 drugs.

5  
6 **Claim 56.** A prescription management system according to  
7 Claim 1 wherein said drug information comprises associated  
8 condition information and dosage information for at least  
9 about fifty percent of all prescribable FDA-approved drugs.

10  
11 **Claim 57.** A prescription management system according to  
12 Claim 1 comprising means to output a newly created  
13 electronic prescription in any desired form such as to  
14 print, to local or remote storage or to remote file transfer  
15 as an electronic prescription.

16  
17 **Claim 58.** A prescription management system according to  
18 Claim 1 comprising means for transmitting said electronic  
19 prescription across a network for fulfillment by a specified  
20 pharmacy.

21  
22 **Claim 59.** A prescription management system according to  
23 Claim 57 comprising a printed dosage schedule output for  
24 said patient.

25  
26 **Claim 60.** A prescription management system according to

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1 Claim 1 wherein multiple physicians accessed by a patient  
2 utilize the system described herein, with common online  
3 access to, and assembly of, a patient's prescription history  
4 record whereby that record provides a current record of new  
5 prescriptions, then a common abuse can be controlled wherein  
6 a patient presents a problem or condition to more than one  
7 physician to obtain multiple prescriptions with a view to  
8 indulging in abusive ingestion or illicit resale.

9  
10 **Claim 61.** A prescription management system according to  
11 Claim 1 wherein the system also provides, for example in the  
12 patient's history record, notification from a pharmacy, or  
13 from a drug benefit plan linked to the pharmacy, of  
14 fulfillment of a prescription, and that information is  
15 available to the prescriber, for example from the patients'  
16 history record, another common abuse wherein a patient  
17 pleads loss of a prescription to obtain a duplicate, can  
18 also be prevented.

19  
20 **Claim 62.** A prescription management system according to  
21 Claim 1 wherein the system also provides, for example in the  
22 patient's history record, notification from a pharmacy, or  
23 from a drug benefit plan linked to the pharmacy, of  
24 fulfillment of a prescription, and that information is  
25 available to the prescriber, for example from the patients'  
26 history record, wherein a patient's failure to have a

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1 prescription fulfilled indicating discontinuance of the  
2 prescribed therapy can be monitored and possibly corrected.

3  
4 **Claim 63.** A prescription produced by the system of claim 1  
5 output in a form selected from the group consisting of  
6 electronic, paper, digitized voice and fax.

7  
8 **Claim 64.** A prescription management system for electronic  
9 prescription creation by a prescriber at a point of patient  
10 care, said prescription being usable by a pharmacist to  
11 dispense drugs, said prescription management system  
12 comprising electronic posting means to select and capture in  
13 said prescription:

- 14 i) a patient identifier;  
15 ii) a prescribed drug;  
16 iii) a dosage for said prescribed drug; and  
17 iv) a patient condition intended by said prescriber to  
18 be mitigated by said prescribed drug.

19  
20 **Claim 65.** A prescription management system according to  
21 Claim 64 further comprising an onscreen drug selection  
22 procedure having a patient condition list specifying  
23 multiple possible patient conditions, having a drug list  
24 specifying multiple possible prescribable drugs and having  
25 drug specification means to select and post a desired drug  
26 to said prescription;

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1 wherein drugs in said drug list are classified according to  
2 a patient condition for which said drugs have efficacy and  
3 said onscreen drug selection procedure lists multiple drugs  
4 for treating each said patient problem.

5  
6 **Claim 66.** A prescription management system according to  
7 Claim 64 comprising drug formulary information being a  
8 selected list of drugs being preferred for prescribing by a  
9 drug benefit provider to said patient.

10  
11 **Claim 67.** In combination, a host computer facility and a  
12 prescription management system according to claim 64  
13 implemented on said host computer facility said host  
14 computer facility supporting network delivery of user-  
15 relevant components of said prescription management system  
16 to multiple remote user interface devices and providing data  
17 and communications resources for users to draw upon  
18 employing said interface devices.

19  
20 **Claim 68.** A combination according to claim 67 wherein said  
21 host computer facility can communicate with multiple  
22 heterogenous remote databases to retrieve complementary data  
23 elements from said databases and comprises:

- 24 i) a dynamic record assembly procedure for online assembly  
25 of a data record from said complementary data elements;  
26 and

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1 ii) a user-device communication procedure to deliver said  
2 dynamically assembled record to a calling user-  
3 interface device as an integral data component of said.  
4 prescription management system.

5  
6 **Claim 69.** A professional product specification system for  
7 electronically creating a technical specification usable by  
8 a professional to specify technical products said product  
9 specification system comprising:

10 a) electronic posting means to select and capture in said  
11 prescription:

- 12 i) a customer identifier;  
13 ii) a specified product; and  
14 iii) product specifications; and

15 b) an onscreen product selection procedure having a  
16 product benefit list specifying multiple possible  
17 customer benefits having a product list specifying  
18 multiple possible specifiable products and having  
19 product specification means to select and post a  
20 desired product to said specification;

21 wherein products in said product list are classified  
22 according to a customer-useful technical purpose attainable  
23 with said products and said onscreen product selection  
24 procedure lists multiple products for providing each said  
25 customer benefit.

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